Appl. No. 10/723,441
Supplemental Amendment

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A magnetic pickup for a stringed musical instrument, where the instrument includes strings suspended between a string support structure that includes a sound board, comprising:

a primary coil rigidly fixed to the sound board of the musical instrument ~~magnetically coupled to a string of the musical instrument and fixedly attached to a string support structure~~;

at least one magnet rigidly fixed to the primary coil that generates a static magnetic field along at least one pole piece encased within the primary coil;

a secondary coil located spaced apart from the primary coil and suspended to move relative to the primary coil; ~~magnetically coupled to the primary coil, the secondary coil further coupled to the primary coil by a flexible suspension mechanism~~

wherein the primary coil is configured to generate a string signal; and

wherein the secondary coil is configured to generate a body signal.

2. (Original) The pickup of claim 1, wherein the primary coil and the secondary coil are electrically coupled in a noise-cancellation circuit.

3. (Original) The pickup of claim 2, wherein the primary coil further comprises a primary coil winding wound in the same direction as a secondary coil winding in the secondary coil.

4. (Currently Amended) The pickup of claim 1, further comprising ~~wherein:~~

~~the string support structure includes a soundboard;~~

~~and the primary coil is fixedly attached to the soundboard~~

a clamping mechanism attached to the primary coil that enables the primary coil to be removably attached to the sound board.

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5. (Currently Amended) The pickup of claim [[4]]1, wherein:

the soundboard includes a soundhole and the pickup is mounted in the soundhole;

~~with~~ the primary coil is positioned between the secondary coil and the strings~~extending into the musical instrument string support structure~~.

6. (Currently Amended) The pickup of claim 1, wherein the soundboard~~string support structure~~ includes a recess and the primary coil is fixedly mounted to a surface of the soundboard~~string support structure~~ with the secondary coil extending into the recess.

7. (Original) The pickup of claim 1, wherein the secondary coil has a resonant frequency in the range from 100 Hz to 500 Hz.

8. (Original) The pickup of claim 1, wherein the flexible suspension mechanism has spring constant in the range from $1x10^4$ N/m to $1x10^6$ N/m.

9. (Original) The pickup of claim 8, wherein the secondary coil has a mass in the range from 15 grams to 25 grams.

10. - 23. (Cancelled)

24. (New) A magnetic pickup for a stringed musical instrument, where the instrument includes strings suspended between a string support structure that includes a sound board, comprising:

a primary coil rigidly fixed to the sound board;

at least one magnet rigidly fixed to the primary coil that generates a static magnetic field along at least one pole piece encased within the primary coil;

a secondary coil suspended below the primary coil via a suspension mechanism;

wherein the suspension mechanism suppresses relative movement of the secondary coil with respect to the primary coil, when the sound board is oscillating in the ring mode.

25. (New) The magnetic pickup of claim 24, wherein:

the suspension mechanism is a pillar;

the centerline of the primary coil defines a Z axis;

the primary coil is elongated in a direction that defines an X axis, which intersects the Z axis and is perpendicular to the Z axis;

the pillar is attached to the primary coil at a point that is centered with respect to the X axis; and

the pillar is attached to the secondary coil at a point that is centered with respect to the X axis.

26. (New) The magnetic pickup of claim 25, wherein:

a Y axis is defined in a direction that is perpendicular to the X axis and the Z axis;

the pillar is attached to the primary coil at a point on the Y axis offset from the intersection of the X axis and the Z axis; and

the pillar is attached to the secondary coil at a point similarly offset along the Y axis.

27. (New) The magnetic pickup of claim 24, wherein the secondary coil has a resonant frequency in the range from 100 Hz to 500 Hz.

28. (New) The magnetic pickup of claim 24, wherein the suspension mechanism has spring constant in the range from $1x10^4$ N/m to $1x10^6$ N/m.

29. (New) The magnetic pickup of claim 24, wherein the secondary coil has a mass in the range from 15 grams to 25 grams.

30. (New) The magnetic pickup of claim 24, wherein the suspension mechanism is a pillar constructed from ABS plastic.